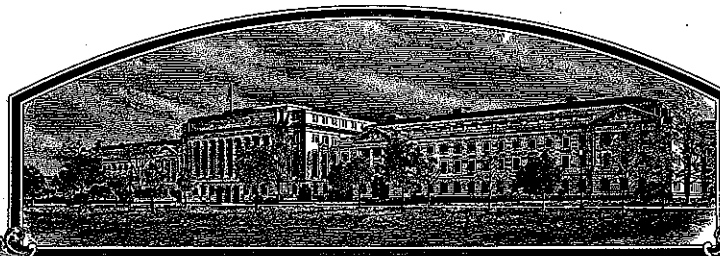


No.

200300147



# THE UNITED STATES OF AMERICA

**TO ALL TO WHOM THESE PRESENTS SHALL COME:**

*Pure Seed Testing, Inc.*

*Whereas*, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC FURNISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SAID APPLICANT(S) TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BLUEGRASS, KENTUCKY

'Bluestone'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixteenth day of July, in the year two thousand and eight.*

*Attest:*

Commissioner  
Plant Variety Protection Office  
U. S. DEPT. OF AGRICULTURE

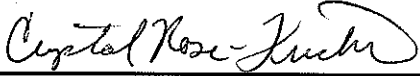
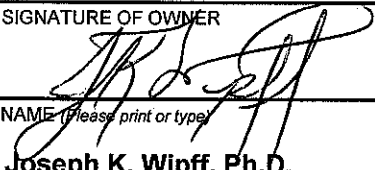
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

1. NAME OF OWNER <b>Pure Seed Testing, Inc.</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME <b>PST-731, PST-A98-731</b>		3. VARIETY NAME <b>Bluestone</b>	
4. ADDRESS (Street and No., or RFD No., City, State, and ZIP Code, and Country) <b>P.O. Box 449 Hubbard, OR 97032</b>		5. TELEPHONE (include area code) <b>(503) 651-2130</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>200300147</b>	
		6. FAX (include area code) <b>(503) 263-0703</b>		FILING DATE <b>February 10, 2003</b>	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>Corporation</b>		8. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Oregon</b>		9. DATE OF INCORPORATION <b>1975</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <b>Crystal Rose-Fricker Pure Seed Testing, Inc. P.O. Box 449 Hubbard, OR 97032</b>				FILING AND EXAMINATION FEES: \$ <b>2705</b> DATE <b>2/10/03</b> CERTIFICATION FEE: \$ <b>768.00</b> DATE <b>6/23/2008</b>	
11. TELEPHONE (Include area code) <b>(503) 651-2130</b>		12. FAX (Include area code) <b>(503) 263-0703</b>		13. E-MAIL <b>pureseedtesting.com crystal@turf-seed.com (503) 651-2130</b>	
14. CROP KIND (Common Name) <b>Kentucky bluegrass</b>					
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)					
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)					
19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes," answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)					
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED					
21. DOES THE OWNER SPECIFY THAT THE CLASSES BE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE 6 <input checked="" type="checkbox"/> FOUNDATION 6 <input checked="" type="checkbox"/> REGISTERED 7 <input checked="" type="checkbox"/> CERTIFIED NUMBER 1, 2, 3, etc. (If additional explanation is necessary, please use the space indicated on the reverse.)					
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO <b>Let: 5/6/2008 per applicant's authorization)</b> IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)					
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)					
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER 			SIGNATURE OF OWNER 		
NAME (Please print or type) <b>Crystal Rose-Fricker</b>			NAME (Please print or type) <b>Joseph K. Wipff, Ph.D.</b>		
CAPACITY OR TITLE <b>President</b>		DATE <b>1/22/01</b>		CAPACITY OR TITLE <b>Taxonomist/Plant Breeder</b>	
				DATE	

**Exhibit A - Revised****Origin and Breeding History of Bluestone (PST-731) Kentucky Bluegrass**

Bluestone [PST-731 (A98-731)] Kentucky bluegrass (*Poa pratensis* L.) appears to have originated as a single, apomictic plant selected from the progeny of a cross between Midnight Kentucky bluegrass (1) and a plant of A90-287 an aberrant derivative of Julia Kentucky bluegrass.

A plant of Midnight was pollinated by A90-287 an aberrant derivative of Julia during the late winter of 1995-1996 in a greenhouse located on the Cook College campus of Rutgers University. Environmental conditions prior to and during pollination were modified to increase sexual reproduction of facultatively apomictic Kentucky bluegrasses (2,3,4). Seed from the Midnight female parent was harvested in the spring of 1996. Seedlings were grown in the greenhouse in the winter of 1996-1997 and hybrids were phenotypically identified. Selected hybrid plants were established in a spaced-plant nursery at the Rutgers University Plant Science Research and Extension Farm at Adelphia, NJ, during the spring of 1997. The following summer, an attractive F<sub>1</sub> hybrid plant was harvested on June 20, 1998. This was a medium maturing, average yielding plant compared to other Kentucky bluegrasses harvested from that nursery. In the fall of 1998, it was planted in a turf plot at Adelphia, New Jersey with the designation A98-731. PST-731 was selected for above average turf quality, excellent establishment, stem rust resistance and leaf spot resistance. In the fall of 1998, a 405 single plant nursery was planted near Hubbard, Oregon. During the summer of 1999 and 2000, 356 plants were harvested for breeder seed.

Seed production of Bluestone is limited to three generations of increase from Breeder seed—one each of Foundation, Registered and Certified. Pure-Seed Testing, Inc. maintains Breeder seed in Oregon and will regenerate as necessary. Bluestone has shown to be a stable and uniform variety from Breeder seed through the Certified seed generation.

Bluestone is a facultative apomict with approximately 85% percent of its progeny appearing genetically identical to the maternal plant Bluestone Kentucky bluegrass has produced turf and seed fields of equal quality, acceptable uniformity and good stability. No variants have been observed in the replication or multiplication of Bluestone Kentucky bluegrass.

### References

1. Meyer, W.A., B. Rose, J.M. Johnson-Cicalese and C.R. Funk. 1984. Registration of 'Midnight' Kentucky bluegrass. Crop Sci. 24(4).
2. Bashaw, E.C., and C.R. Funk. 1987. Apomictic grasses. P. 40-82. In F. Lemaire (ed.) Proc. Int. Turfgrass Ref. Conf., 5<sup>th</sup>, Avignon, France. INRA Publ., Versailles.
3. Hintzen, J.J., and A.J.P. van Wijk. 1985. Ecotype breeding and hybridization in Kentucky bluegrass (*Poa pratensis* L.) p. 213-219. In F. Lemaire (ed.) Proc. Int. Turfgrass Res. Conf., 5<sup>th</sup>, Avignon, France. INRA Publ., Versailles.
4. Pepin, G.W., and C.R. Funk. 1971. Intraspecific hybridization as a method of breeding Kentucky bluegrass for turf. Crop Sci. 11:445-448.

**Exhibit B - Revised****Novelty Statement for Bluestone (PST-731) Kentucky Bluegrass**

Bluestone (PST-731) Kentucky bluegrass is most similar to the variety, Midnight. Upon close comparisons the following differences were found.

1. Bluestone has a plant height of at least 3.9 cm taller than Midnight (Tables 1 and 1A).
2. Bluestone has a tiller leaf width at least 0.5 mm narrower than Midnight (Tables 1 and 1A).
3. Bluestone has a tiller leaf sheath length at least 1.2 cm shorter than Midnight (Tables 1 and 1B).
4. Bluestone has a panicle length at least 1.1 cm shorter than Midnight (Tables 1A and 1B).

Table 1. 2002 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2001 near Hubbard, OR.

Entry	Plant Height (cm)	Tiller Leaf Sheath Length (cm)	Tiller Leaf Width (mm)
Bluestone	50.8	6.0	2.3
Midnight	45.7	7.3	3.0
LSD (0.05)	2.2	0.5	0.3

Table 1A. 2002 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR.

Entry	Plant Height (cm)	Panicle Length (cm)	Tiller Leaf Sheath Length (cm)	Branches In Lowest Whorl (#)	Tiller Leaf Length (cm)	Tiller Leaf Width (mm)
Bluestone	60.7	6.9	7.6	3.6	6.4	3.2
Baron	58.5	7.3	6.7	4.2	4.8	3.2
Midnight	56.8	8.0	7.0	3.6	6.7	3.7
LSD (0.05)	2.4	0.8	0.6	0.3	0.6	0.3

Table 1B. 2001 mean morphological measurements for entries in a Kentucky bluegrass seed yield trial seeded fall of 2000 near Hubbard, OR.

Entry	Tiller Leaf Sheath Length (cm)	Panicle Length (cm)
Bluestone	8.0	7.7
Midnight	9.2	9.2
LSD (0.05)	1.1	0.5

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY PROGRAM  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705**

**EXHIBIT C  
(BLUEGRASS)**

**OBJECTIVE DESCRIPTION OF VARIETY  
BLUEGRASS  
(*Poa* spp.)**

NAME OF APPLICANT(S)  <b>Pure Seed Testing, Inc.</b>	TEMPORARY DESIGNATION  <b>PST-731, PST-A98-731</b>	VARIETY NAME  <b>Bluestone</b>
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)  <b>P.O. Box 449, Hubbard, OR 97032</b>		FOR OFFICIAL USE ONLY PVPO NUMBER  <b>#200300147</b>

Select the number which characterizes the variety in the features described below. For measured characteristics use leading zeros as necessary in order to fill all blanks (e.g. 089). Those characteristics marked with a star \* are preferred to be recorded. Any others should be recorded to help establish novelty or uniqueness. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate the system used:

Describe location of test area, conditions, and number of Plants used: Pure Seed Testing Research Farm near Hubbard, OR. Sixty plants measured from P.V.P. nursery planted in a randomized complete block with three replications of 20 plants each.

1. SPECIES:

1 = *Poa compressa*      2 = *P. pratensis*      3 = *P. trivialis*      4 = Others (Please Specify):

Chromosome Number

2. ADAPTATION: (0 = Not Tested, 1 = Not Adapted, 2 = Adapted, 3 = Well Adapted)

Northeast       Transitional Zone       Southeast       North Central  
 Pacific N.W.       Intermountain       Southwest (CA, AZ)       Other (Please Specify):

3. MATURITY (At first anthesis): Give test area near Hubbard, Oregon.

\*       1 = Very Early      2 = Early (Delta, Mystic)      3 = Medium Early (Fylking, Nugget)  
4 = Medium late (Newport, Adelphi, Aquila)      5 = Late (Merion, Baron, Enmundi)  
6 = Very Late (Pacific)

Date of First Anthesis: May 28, 2001

<input type="text"/> <input type="text"/>	Number of days earlier than	* <input type="text"/>	1 = Nugget	2 = Frylking	3 = Delta
	Maturity same as	* <input type="text"/>	4 = Merion	5 = Newport	6 = Baron
<input type="text" value="1"/> <input type="text" value="5"/>	Number of days later than	* <input type="text" value="1"/>	7 = Mystic	8 = Sabre	9 = Reubens

4. PLANT HEIGHT (At maturity-Average of longest shoot of 10 plants from soil surface to top of panicle): *Test Area* Hubbard, OR  
 1 = Short 2 = Medium short (Baron, Fylking, Mystic) (Table 1A)  
 3 = Medium tall (Merion, Adelphi) 4 = Tall (delta) 5 = Very tall

★     cm Height

cm Shorter than

Height same as

cm Taller than

★   
 ★   
 ★

1 = Nugget 2 = Frylking 3 = Delta  
 4 = Merion 5 = Newport 6 = Baron  
 7 = Mystic 8 = Sabre 9 = Reubens

5. GROWTH HABIT:

★  Habit: 1 = Prostrate (Nugget) 2 = Semiprostrate (Merion) 3 = Erect (Delta)

cm Amount of spread by rhizomes in 1 year (give test area: \_\_\_\_\_)

6. LEAF BLADE:

★  Green color: 1 = Light green (Mystic) 2 = Medium green (Fylking, Bonnieblue)  
 3 = Moderately dk. green (Merion, Adelphi) 4 = Very dk. green (Nugget, Glade, Enmundi)

★  Bluegreen color: 1 = Not bluegreen (Mystic, Touchdown, Parade) 2 = Moderately bluegreen (Merion, A-34)  
 3 = Bluegreen (Nugget, Enmundi, Adelphi) 4 = Strongly bluegreen (Majestic)

Winter color: 1 = Light green 2 = Dark green 3 = Light purple  
 4 = Dark purple 5 = Not purple 6 = Not green or purple

★  Hairs upper side: 1 = Absent (Nugget) 2 = Sparse (Merion) 3 = Dense (Park)

Hairs lower side: 1 = Absent (Fylking, Merion) 2 = Sparse 3 = Dense (Nugget)

Luster upper side: 1 = Shiny (Eclipse, Enmundi) 2 = Dull (Aquila, Parade)

Luster lower side: 1 = Shiny (Mystic, Enmundi) 2 = Dull (Barbie, Eclipse)

★  Margin hairs 1 = Absent (Delta) 2 = Present (Fylking, Merion)  
 (Fringe on Margin or Base):

★  Width: 1 = Very fine (Mystic) 2 = Fine (Nugget) 3 = Medium (Merion, Fylking)  
 4 = Broad (Adelphi, Baron) 5 = Very broad (Monopoly)

mm Width (tiller leaf)

mm Narrower than

Width same as

mm Wider than

★   
 ★   
 ★

1 = Nugget 2 = Frylking 3 = Delta  
 4 = Merion 5 = Newport 6 = Baron  
 7 = Mystic 8 = Sabre 9 = Reubens

mm Length (tiller leaf)

mm Shorter than

Length same as

mm Longer than

★   
 ★   
 ★

1 = Nugget 2 = Frylking 3 = Delta  
 4 = Merion 5 = Newport 6 = Baron  
 7 = Mystic 8 = Sabre 9 = Reubens



Position of flag leaf (angle to stem): 1 = Appressed 2 = Open angle, yet stiff 3 = Nodding

7. LEAF SHEATH: See Table 1A

mm sheath length

#200300147

- ★  Seedling Color (base of sheath): 1 = Green (Nugget, Merion) 2 = Red (Delta)
- ★  Hairs on Margin: 1 = Absent (Fylking) 2 = Present (Nugget)
- ★  Margin Roughness (to touch): 1 = Smooth (Delta) 2 = Rough (Sabre)
- Hairs on Surface: 1 = Absent ( ) 2 = Present (Nugget)
- Surface Roughness (to touch): 1 = Smooth (Fylking) 2 = Rough (Ram I)
- Hairs on both sides just beneath leaf blade (under collar): 1 = Absent (Merion) 2 = Present (Nugget)
- ★  Hairs on ligule: 1 = Absent (Fylking) 2 = Short (Baron) 3 = Long (Nugget)
- Glaucosity: 1 = Absent (Mystic, Enmundi) 2 = Present (Birka)
- Keel: 1 = Absent (Ram I) 2 = Present (Adelphi)

8. PANICLE (Mature Plant):

mm Length (Lowest branch whorl to top, for 10 plants) Test Area: See Table 1A.

mm Shorter than  1 = Nugget 2 = Frylking 3 = Delta

Panicle same as  4 = Merion 5 = Newport 6 = Baron

mm Longer than  7 = Mystic 8 = Sabre 9 = Reubens

- ★  Color (at 50% flowering): 1 = Not red (Fylking) 2 = Red (Nugget)
- Shape of Rachis (opposite lower side branches): 1 = No bend (Nugget) 2 = Bend (Merion)
- ★  Collar: 1 = Opened (Nugget) 2 = Closed (Merion)
- ★  Branches Attitude (Lowest whorl): 1 = Drooping (America, Prato) 2 = Horizontal (Merion) 3 = Ascending (Tundra)
- Number of main branches in lowest whorl:
- ★  Panicle habit: 1 = Nodding (Newport) 2 = Upright (Nugget)
- ★  Panicle type: 1 = Open 2 = Intermediate 3 = Compact
- Anther color (anthesis): 1 = Purple 2 = Yellow 3 = Brown

9. LEMMA

- ★  Keel 1 = Glabrous 2 = Slightly pubescent 3 = Pubescent
- ★  Marginal Nerves
- Intermediate Nerves: 1 = Distinct 2 = Obscure
- Basal Webbing: 1 = Absent 2 = Scant (Baron) 3 = Copious (Merion)

10. SEED: (Floret-not dehulled)

#200300147

★  Apomixis Percentage: 1 = more than 95 2 = 85 to 95 3 = less than 85  
 Phenol Reaction: 1 = none-lemma removed (Merion) 2 = Beige (Cougar) 3 = Brown (Windsor)  
 4 = Black (Mystic -2hrs) 5 = Black ( -24hrs)

mm Width (average of 10)  mm Length

Milligrams per 10,000 seed

Milligrams less than

Weight same as

Milligrams more than

Weight Class (g per 10,000 seed): 1 = Light (< 3g Sydsport, Merion)  
 2 = Medium (3g - 4g Adelphi, Parade)  
 3 = Heavy (> 4g Fylking, Nugget)

★  } 1 = Nugget 2 = Frylking 3 = Delta  
 ★  } 4 = Merion 5 = Newport 6 = Baron  
 ★  } 7 = Mystic 8 = Sabre 9 = Reubens

11. ENVIRONMENTAL RESISTANCE:

(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

★  Cool Temperature (Winter color)  Cold (injury)  Heat  Drought  
 Shade  Low Fertility  Acid Soil (< pH 5.5)  Alkalinity (pH > 7.5)  
 Salinity  Soil Compaction  Poor Drainage  Air Pollution  
 Other (Please Specify):

12. DISEASE RESISTANCE:

(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

<input type="text" value="3"/> Melting-Out <i>Drechslera poae</i> ( <i>Helminthosporium vagans</i> )	<input type="text" value="0"/> Sclerotinia <i>S. borealis</i>
<input type="text" value="4"/> Helminthosporium Leaf Spot <i>Bipolaris sorokiniana</i>	<input type="text" value="2"/> Stem Rust <i>Puccinia graminis</i>
<input type="text" value="0"/> Brown Patch <i>Rhizoctonia solani</i>	<input type="text" value="2"/> Stripe Rust <i>P. striiformis</i>
<input type="text" value="2"/> Powdery Mildew <i>Erysiphe graminis</i>	<input type="text" value="2"/> Leaf Rust <i>P. poae-nemoralis</i>
<input type="text" value="3"/> Stripe Smut <i>Ustilago striiformis</i>	<input type="text" value="0"/> Orange Stripe Rust <i>P. poarum</i>
<input type="text" value="0"/> Flag Smut <i>Urocystis agropyri</i>	<input type="text" value="0"/> Pythium Blight <i>Pythium</i> spp.
<input type="text" value="0"/> Pink Snow Mold <i>Fusarium nivale</i>	<input type="text" value="4"/> Red Thread <i>Corticium fujiciforme</i>
<input type="text" value="3"/> Ergot <i>Claviceps purpurea</i>	<input type="text" value=""/> Other (Please Specify):
<input type="text" value="0"/> Fusarium Blight <i>Fusarium roseum</i> , <i>F. tricinctum</i>	<input type="text" value=""/> Other (Please Specify):
<input type="text" value="0"/> Typhula Blight <i>Typhula</i> spp.	
<input type="text" value="0"/> Dollar Spot <i>Sclerotinia homoeocarpa</i>	

## 13. INSECTS, NEMATODES, RESISTANCE:

(0 = Not Tested; 1 = Very Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Highly Resistant)

0

Chinch Bug *Blissus* spp. (give species: )

0

Sod Webworm *Crambus* spp. (give species:)

3

Bluegrass Billbug *Sphenophorus parvulus*

0

White Grub: Japanese Beetle, Chafers (give species )

0

Greenbug Aphid *Schizaphis graminum*

0

Other (Please Specify):

0

Other (Please Specify):

14. Give variety or varieties that most closely resemble the application variety. For the following characteristics indicate Degree of Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is less than comparison variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Maturity-heading	Midnight	2	Leaf Width	Midnight	1
Height	Midnight	3	Leaf Color Spring	Midnight	2
Seed Size	Baron	1	Leaf Color Summer	Midnight	2
Seed Weight	Baron	1	Leaf Color Winter	Midnight	2
Cold Injury	Midnight	2	Drought	Midnight	2
Heat	Midnight	2	Disease**	Midnight	3
Shade	Midnight	2			

\*\*Specify each disease evaluated.

*Leaf spot*

## 15. ADDITIONAL DESCRIPTION

*Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.*

**Exhibit D - Revised****Additional Description of Bluestone (PST-731) Kentucky Bluegrass**

Bluestone (PST-731) is a late maturing, elite Kentucky bluegrass with a low growth habit. It has excellent turf quality with good leaf spot resistance (Table 2 and 3).

Bluestone (PST-731) is a compact type Kentucky bluegrass. It exhibits long winter dormancy, with a late spring green-up. PST-731 has a very dark green color with good heat tolerance for excellent summer performance (Table 4).

Bluestone (PST-731) is susceptible to stripe rust and powdery mildew.

Table 2. 2001 leaf spot, winter color, and turf quality ratings for entries in a Kentucky bluegrass turf trial seeded fall of 2000 near Hubbard, OR.

#200300147

Entry	Leaf Spot	Winter Color	Turf Quality				
	31 Jan	31 Jan	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Mean
North Star	4.7 <sup>1</sup>	4.3 <sup>2</sup>	5.0 <sup>3</sup>	6.0	7.8	6.6	6.3
Moonlight	5.7	5.7	6.1	6.2	5.9	4.8	5.8
Blacksburg	5.0	5.3	5.0	5.3	5.8	6.0	5.5
Unique	5.7	6.7	6.1	5.4	5.8	4.6	5.5
Baron	4.7	5.7	4.9	5.4	6.0	5.0	5.3
Julia	3.0	5.0	4.9	5.4	6.0	4.4	5.2
<b>Bluestone</b>	<b>6.0</b>	<b>5.3</b>	<b>4.4</b>	<b>5.0</b>	<b>5.6</b>	<b>4.8</b>	<b>4.9</b>
Midnight	5.7	5.3	4.8	4.7	5.7	4.7	4.9
Voyager	3.3	4.7	3.9	3.8	4.9	5.0	4.4
Kenblue	2.0	2.3	2.4	2.2	3.4	3.8	3.0
<b>LSD (0.05)</b>	<b>1.5</b>	<b>1.0</b>	<b>1.1</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>

<sup>1</sup>9 = no disease

<sup>2</sup>9 = dark green

<sup>3</sup>9 = ideal

Table 3. 2001 mean establishment, winter color, and turf quality ratings for entries in a Kentucky bluegrass turf trial seeded fall of 2000 near Rolesville, NC.

Entry	Establishment	Winter Color	Turf Quality				
		7 Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Mean
Moonlight	6.7 <sup>1</sup>	6.7 <sup>2</sup>	7.7 <sup>3</sup>	7.0	6.5	5.2	6.6
Midnight	5.0	8.0	6.0	6.6	6.6	6.3	6.4
<b>Bluestone</b>	<b>4.7</b>	<b>6.7</b>	<b>5.0</b>	<b>5.8</b>	<b>5.8</b>	<b>4.5</b>	<b>5.3</b>
Baron	5.7	4.7	5.3	5.6	4.7	4.7	5.1
Unique	5.3	2.7	6.0	5.6	4.3	3.5	4.9
Julia	5.0	3.3	6.0	4.8	3.8	3.7	4.5
Kenblue	5.7	2.3	3.0	1.6	2.5	3.0	2.5
<b>LSD (0.05)</b>	<b>2.3</b>	<b>2.2</b>	<b>1.6</b>	<b>1.0</b>	<b>1.1</b>	<b>1.5</b>	<b>0.9</b>

<sup>1</sup>9 = 100% established

<sup>2</sup>9 = dark green

<sup>3</sup>9 = ideal

Table 4. Performance of Kentucky bluegrass cultivars and selections in a turf trial seeded in August 2000 at North Brunswick, NJ. (Includes all entries of the 2000 National Kentucky Bluegrass Medium-High Maintenance Test – NTEP.)

Entry	Cultivar or Selection	Turf Quality <sup>1</sup> 2001 Avg.	Establish- ment <sup>2</sup> Sept. 2001	Spring Green- up <sup>3</sup> April 2001	Heat Toler- ance <sup>4</sup> July 2001	Density <sup>5</sup> Sept. 2001	Genetic Color <sup>6</sup> Sept. 2001	Leaf Texture <sup>7</sup> Nov. 2001	Winter Color <sup>8</sup> Jan. 2002
1	Moonlight	7.1	6.7	3.3	8.3	5.7	7.7	3.3	5.0
2	J-2695	6.9	6.7	2.0	7.3	7.3	6.7	6.0	6.3
6	<b>Bluestone</b>	<b>6.7</b>	<b>5.2</b>	<b>1.3</b>	<b>5.7</b>	<b>7.0</b>	<b>7.3</b>	<b>5.7</b>	<b>6.7</b>
10	Midnight	6.5	5.6	1.7	6.0	7.0	7.0	5.7	6.3
92	Unique	5.4	5.3	3.0	8.0	6.3	4.7	6.3	3.0
100	Baron	5.4	5.3	2.7	7.0	6.3	4.7	4.7	4.3
133	Julia	5.1	3.9	3.7	4.3	6.3	5.3	6.3	6.3
164	Kenblue	4.6	7.4	9.0	3.0	7.7	3.7	9.0	4.3

LSD at 5% =

0.7      1.0      1.5      1.6      1.5      1.2      1.3      1.2

<sup>1</sup>9 = best turf quality

<sup>2</sup>9 = quickest establishment (Many entries with slow establishment were established with new crop seed showing varying degrees of after-ripening dormancy.)

<sup>3</sup>9 = earliest spring green-up

<sup>4</sup>9 = best heat tolerance

<sup>5</sup>9 = highest shoot density

<sup>6</sup>9 = darkest green color

<sup>7</sup>9 = finest leaf texture

<sup>8</sup>9 = brightest green color during winter

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 652a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

EXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) <b>Pure Seed Testing, Inc.</b>	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <b>PST-731, A98-731</b>	3. VARIETY NAME <b>Bluestone</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>P.O. Box 449 Hubbard, OR 97032</b>	5. TELEPHONE (include area code) <b>(503) 651-2130</b>	6. FAX (include area code) <b>(503) 263-0703</b>
7. PVPO NUMBER <b>#200300147</b>		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?  
If no, give name of country ☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following: ☒ YES ☐ NO

a. If original rights to variety were owned by individual(s):  
Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country

b. If original rights to variety were owned by a company:  
Is the original breeder(s) U.S. based company? If no, give name of country ☒ YES ☐ NO

11. Additional explanation on ownership (If needed, use reverse for extra space):

**Pure Seed Testing, Inc. has licensed Bluestone to Mountain View Seeds, Ltd. to grow, produce and market this variety in the United States of America.**

PLEASE NOTE:

Plant variety protection can be afforded only to owners (now licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

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